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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/691,107	10/22/2003	Guenter Meckes	AGFA 267-KFM	4765

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MILDE & HOFFBERG, LLP  
10 BANK STREET  
SUITE 460  
WHITE PLAINS, NY 10606

EXAMINER
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CHU, RANDOLPH I

ART UNIT	PAPER NUMBER
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2624

DATE MAILED: 09/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/691,107	<b>Applicant(s)</b> MECKES, GUENTER	
	<b>Examiner</b> Randolph Chu	<b>Art Unit</b> 2632	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 October 2003.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>20031022</u> | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of recorded in the file.

### ***Information Disclosure Statement***

2. The information disclosure statement (IDS) submitted on 10/22/2003 has been considered by the examiner.

### ***Claim Rejections - 35 USC § 101***

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-11 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. In order to be statutory under 35 U.S.C. 101, method has to produce a useful, concrete, and tangible result. In the case of the instant claims, the method produces useful and concrete but not tangible result. For example, merely determining or calculating a price may not be held to be a tangible result, instead reasonably being interpreted as just a thought or a computation within a processor; however, calculating a price of an item to sell and then conveying the calculated price to a potential customer would be a tangible result.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 1 is rejected under 35 USC 103(a) as being unpatentable over the admitted Information by applicant in view of Miles Research ("How to White Balance the JVC Video Camera", <http://Milesresearch.com/main/whitebalance.htm>).

The admitted Information discloses a method for the determination of color-density correction values for the reproduction of digital image data, wherein image color-density values of the digital image data are at least partially determined by area and are compared with known reproduction color-density values (pages 2-3 of the specification).

The admitted Information does not disclose identifying eye scleras within the image data, and determining image color-density values based on said scleras.

Miles Research teaches identifying eye scleras within the image data, and determining image color-density values based on said scleras.

The admitted Information and Miles Research are analogous art because they are in the "same field of endeavor", image processing that enhance color image based on scleras.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to enhance color image based on scleras in the method of the admitted Information.

The suggestion/motivation for doing so would have been that white balance is necessary if the lamp changes its exact color temperature. If the sclera of the eye is showing up as too yellow or too blue, then the White balance may need re-adjustment (Miles Research).

Therefore, it would have been obvious to combine Miles Research with the admitted Information to obtain the invention as specified in claim 1.

6. Claim 2 is rejected under 35 USC 103(a) as being unpatentable over the admitted Information by applicant in view of Miles Research ("How to White Balance the JVC Video Camera", <http://Milesresearch.com/main/whitebalance.htm>) in further view of Kinjo et al. (US Patent 6,631,208)

The admitted Information in view of Miles Research teaches all the limitations of claim 1 which claim 2 depends.

The admitted Information in view of Miles Research does not teach that eye positions are determined by means of a face-detection method in order to identify the scleras.

Kinjo et al. teaches that eye positions are determined by means of a face-detection method in order to identify the scleras (Fig. 13, 15, and 16; col. 14 lines 13-28).

The admitted Information, Miles Research and Kinjo et al. are analogous art because they are in the "same field of endeavor", image processing that enhance color image based on scleras.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to determine eye positions by a face-detection in the method of the admitted Information and Miles Research.

The suggestion/motivation for doing so would have been that once face is detected, eye positions can be easily found.

Therefore, it would have been obvious to combine Miles Research and Kinjo et al. with the admitted Information to obtain the invention as specified in claim 2.

7. Claim 3 is rejected under 35 USC 103(a) as being unpatentable over the admitted Information by applicant in view of Miles Research ("How to White Balance the JVC Video Camera", <http://Milesresearch.com/main/whitebalance.htm>) in further view of Kinjo et al. (US Patent 6,631,208)

The admitted Information in view of Miles Research teaches all the limitations of claim 1 which claim 3 depends.

The admitted Information in view of Miles Research does not teach that eye positions are determined by means of a face-detection method in order to identify the scleras.

Kinjo et al. teaches that eye positions are determined by means of a "red-eye" detection method in order to identify the scleras. (Fig. 16; col. 14 lines 43-49).

The admitted Information, Miles Research and Kinjo et al. are analogous art because they are in the "same field of endeavor", image processing that enhance color image based on scleras.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to determine eye positions by means of a "red-eye" detection method in the method of the admitted Information and Miles Research.

The suggestion/motivation for doing so would have been that using intensity values, scleras positions can be easily identified.

Therefore, it would have been obvious to combine Miles Research and Kinjo et al. with the admitted Information to obtain the invention as specified in claim 3.

8. Claim 4 is rejected under 35 USC 103(a) as being unpatentable over the admitted Information by applicant in view of Miles Research ("How to White Balance the JVC Video Camera", <http://Milesresearch.com/main/whitebalance.htm>) in further view of Kinjo et al. (US Patent 6,631,208)

The admitted Information in view of Miles Research teaches all the limitations of claims 1 which claims 2 and 4 depends.

The admitted Information in view of Miles Research does not teach that areas of approximately white color are localized in the region of the eye positions in order to identify the scleras.

Kinjo et al. teaches that areas of approximately white color are localized in the region of the eye positions in order to identify the scleras (Fig. 16; col. 14 lines 43-49).

The admitted Information, Miles Research and Kinjo et al. are analogous art because they are in the "same field of endeavor", image processing that enhance color image based on scleras.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to identify the scleras using areas of approximately white color are localized in the region of the eye positions in the method of the admitted Information and Miles Research.

The suggestion/motivation for doing so would have been that using gray intensity values  $d$  (whiter when  $d$  is higher), scleras positions can be easily identified.

Therefore, it would have been obvious to combine Miles Research and Kinjo et al. with the admitted Information to obtain the invention as specified in claim 4.

9. Claim 5 is rejected under 35 USC 103(a) as being unpatentable over the admitted Information by applicant in view of Miles Research ("How to White Balance the JVC Video Camera", <http://Milesresearch.com/main/whitebalance.htm>) in further view of Kinjo et al. (US Patent 6,631,208)

The admitted Information in view of Miles Research teaches all the limitations of claim 1 which claim 5 depends.

The admitted Information in view of Miles Research does not teach identifying scleras are verified based on their surrounding environment.

Kinjo et al. teaches that identifying scleras are verified based on their surrounding environment (Fig. 16; col. 14 lines 43-49).



The admitted Information, Miles Research and Kinjo et al. are analogous art because they are in the "same field of endeavor", image processing that enhance color image based on scleras.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to identify and verify scleras based on their surrounding environment in the method of the admitted Information and Miles Research.

The suggestion/motivation for doing so would have been that using intensity difference between pupil and scleras, scleras could be easily identified and verified (col. 14 lines 43-49).

Therefore, it would have been obvious to combine Miles Research and Kinjo et al. with the admitted Information to obtain the invention as specified in claim 5.

10. Claim 6 is rejected under 35 USC 103(a) as being unpatentable over the admitted Information by applicant in view of Miles Research ("How to White Balance the JVC Video Camera", <http://Milesresearch.com/main/whitebalance.htm>) in further view of Kinjo et al. (US Patent 6,631,208)

The admitted Information in view of Miles Research teaches all the limitations of claims 1 which claim 6 depends.

The admitted Information in view of Miles Research does not teach that identified scleras are verified based on their color saturation.

Kinjo et al. teaches that identified scleras are verified based on their color saturation. (Fig. 16; col. 14 lines 43-49).

The admitted Information, Miles Research and Kinjo et al. are analogous art because they are in the "same field of endeavor", image processing that enhance color image based on scleras.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to verify identified scleras based on their color saturation in the method of the admitted Information and Miles Research.

The suggestion/motivation for doing so would have been that using gray intensity values d (whiter when d is higher), scleras could be easily verified.

Therefore, it would have been obvious to combine Miles Research and Kinjo et al. with the admitted Information to obtain the invention as specified in claim 6.

11. Claim 7 is rejected under 35 USC 103(a) as being unpatentable over the admitted Information by applicant in view of Miles Research ("How to White Balance the JVC Video Camera", <http://Milesresearch.com/main/whitebalance.htm>) in further view of Francini et al. (US Patent 6,532,011)

The admitted Information in view of Miles Research teaches all the limitations of claims 1 which claim 7 depends.

The admitted Information in view of Miles Research does not teach that scleras are verified based on their geometric characteristics.

Francini et al. teaches that identified scleras are verified based on their geometric characteristics. (col. 7 lines 39-45).

The admitted Information, Miles Research and Kinjo et al. are analogous art because they are in the "same field of endeavor", image processing.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to verify identified scleras based on their their geometric characteristics in the method of the admitted Information and Miles Research.

The suggestion/motivation for doing so would have been that using previously stored geometric model, scleras could be easily verified.

Therefore, it would have been obvious to combine Miles Research and Francini et al. with the admitted Information to obtain the invention as specified in claim 7.

12. Claims 8 and 9 are rejected under 35 USC 103(a) as being unpatentable over the admitted Information by applicant in view of Miles Research ("How to White Balance the JVC Video Camera", <http://Milesresearch.com/main/whitebalance.htm>) in further view of DeLuca (US Patent 6,407,777)

The admitted Information in view of Miles Research teaches all the limitations of claims 1 which claims 8 and 9 depend.

The admitted Information in view of Miles Research does not teach that an area is formed consisting of substantially all points belonging to a sclera. The admitted Information in view of Miles Research also does not teach that substantially all points within the area are used to determine image color-density values of the sclera.

DeLuca teaches that an area is formed consisting of substantially all points belonging to a sclera (Figure 6). DeLuca also teaches that substantially all points

within the area are used to determine image color-density values of the sclera (col. 3 lines 33-38).

The admitted Information, Miles Research and DeLuca are analogous art because they are in the "same field of endeavor", image processing that enhance color image based on scleras.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to form area consisting of substantially all points belonging to a sclera and determine image color-density values of the sclera in the method of the admitted Information and Miles Research.

The suggestion/motivation for doing so would have been that with forming area of sclera, elements of eye could be easily identified, and with determine image color-density values of the sclera, range of colors and hues and brightnesses indicative of the sclera of the human eye.

Therefore, it would have been obvious to combine Miles Research and DeLuca et al. with the admitted Information to obtain the invention as specified in claims 8 and 9.

13. Claim 10 is rejected under 35 USC 103(a) as being unpatentable over the admitted Information by applicant in view of Miles Research ("How to White Balance the JVC Video Camera", <http://Milesresearch.com/main/whitebalance.htm>) in further view of Fieguth (Automated Measurement of Bulbar Redness, Investigative Ophthalmology and Visual Science. 2002)

The admitted Information in view of Miles Research teaches all the limitations of claim 1 which claim 10 depends.

The admitted Information in view of Miles Research does not teach that reproduction color-density values are determined based on statistics of color-density values from a large number of sample eye scleras.

Fieguth teaches that that reproduction color-density values are determined based on statistics of color-density values from a large number of sample eye scleras.

The admitted Information, Miles Research and Fieguth are analogous art because they are in the "same field of endeavor", image processing/ analysis based on scleras.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to determine color-density values based on statistics of color-density values from a large number of sample eye scleras in the method of the admitted Information and Miles Research.

The suggestion/motivation for doing so would have been that easily implemented image-analysis and statistical procedures were able to reliably predict median clinical grades of conjunctival redness.

Therefore, it would have been obvious to combine Miles Research and Fieguth with the admitted Information to obtain the invention as specified in claim 10.

14. Claim 11 is rejected under 35 USC 103(a) as being unpatentable over the admitted Information by applicant in view of Miles Research ("How to White Balance the

JVC Video Camera", <http://Milesresearch.com/main/whitebalance.htm>) in further view of Zahn (German Patent 4230842)

The admitted Information in view of Miles Research teaches all the limitations of claim 1 which claim 11 depends.

The admitted Information in view of Miles Research does not teach that color-density correction values in dependence upon skin tones.

Zahn teaches that that color-density correction values in dependence upon skin tones.

The admitted Information, Miles Research and Zahn are analogous art because they are in the "same field of endeavor", image processing that enhance the color image.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to correct color-density values in dependence upon skin tones in the method of the admitted Information and Miles Research.

The suggestion/motivation for doing so would have been that Ensures correct color reproduction of skin tones with reliable identification of skin tone points.

Therefore, it would have been obvious to combine Miles Research and Zahn with the admitted Information to obtain the invention as specified in claim 11.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Randolph Chu whose telephone number is 571-270-

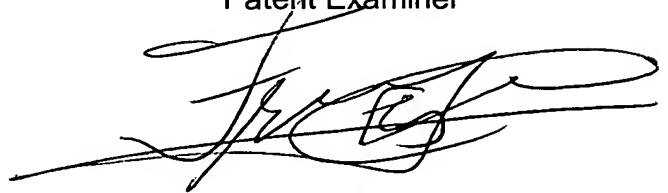
Art Unit: 2632

1145. The examiner can normally be reached on Monday to Thursday from 7:30 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frantz F. Jules can be reached on 571-272-6681. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RIC/

Frantz F. Jules  
Supervisory  
Patent Examiner

A handwritten signature in black ink, appearing to read 'Frantz F. Jules', is written over the printed name and title.